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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

RIVELL, JOHN A

ART UNIT

PAPER NUMBER

3753

DATE MAILED: 05/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/081,531

Applicant(s)

WASS ET AL.

Examiner

John Rivell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/6/06 (amendment).
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,6-10 and 20-27 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 20,21,25 and 27 is/are allowed.
6) ☒ Claim(s) 1,6-10,22-24 and 26 is/are rejected.
7) ☒ Claim(s) 10,23 and 24 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 06 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

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Applicant's arguments with respect to claims 1, 6-10 and 20-21 have been considered but are moot in view of the new ground(s) of rejection.

Claims 2-5 and 11-19 have been canceled. New claims 22-27 have been added. Thus claims 1, 6-10, and 20-27 are pending.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 6-10 and 22-24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Specifically, independent claims 1, 10 and 22, and thus all claims dependent therefrom, include the now amended recitation "... seal seated entirely (emphasis here) within (the) recessed seat".

Considering applicants remarks regarding the above noted recitation (which remarks do not form part of the specification) in the claims, and the specification at page 5, line 27 through page 6, line 6, and figure 7a, there does not appear to be appropriate support on the application as originally filed for the now recited "seal seated entirely within the recessed seat". For example, as illustrated in figure 7a, the "rounded outermost lip 98" described on page 6 of the specification, is shown in figure 7a as being outside of the boundaries of recessed seat 82. As there is no exacting

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description in the specification as to the definite boundaries of the recessed seat 82, this specification description and illustration in figure 7a does not comport with the now claimed and argued "seat seated entirely within (the) recessed seat".

On the presumption that the now claimed "seat seated entirely within the recessed seat" is in fact within the confines of the application as originally filed, then the following applies.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 22 and 26 are rejected under 35 U.S.C. §102 (b) as being anticipated by Fort.

In claim 1, the recitation "for use in exhausting over-pressure in an inflatable device as well as topping off or inflating the inflatable device" is a statement of intended use bearing no patentable weight.

The patent to Fort discloses a "pressure relief and topping valve... comprising: a valve body (16) having a fluid passage therein with an internal shoulder (20); a first poppet (28) having a seal (generally at 52, see fig. 3) seated entirely within (see the comments below) a recessed seat (at 82, 72, 70) therein and biased against the internal shoulder (20) by a first spring (30) that operates independently, the first poppet (28) and seal (52) having an aperture (the "hole" accommodating the second valve 42) therein surrounded by the recessed seat (82, 72, 70); a second poppet (42) biased toward the

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aperture against the seal (52 at 56) by a second spring (46) that operates independently from the first spring (30); in which the seal (52) comprises an axially directed seating surface (at 54, see fig. 3) for sealable seating against the internal shoulder (20) when the first poppet (28) is biased against the internal shoulder (20), and a radially inwardly directed sealing shoulder (at 56) for sealable seating against the second poppet (42) when the second poppet (42) is biased by the second spring (46)” as recited in claim 1.

As it concerns the recitation “seal seated entirely within the recessed seat” as disclosed in the instant application as originally filed, the “rounded outermost lip 98” which appears in fig. 7a to extend outside of the boundary of the “recessed seat 82” is (allegedly) within the boundary of the recessed seat 82. As such the recitation “entirely within” is interpreted to mean that the outside periphery of the entire seal 24 defines the entire boundary of the “recessed seat” 82 opposite of the surfaces 90, 92 of poppet 22 which supports the seal 24. Thus, commensurate with the originally filed application, the seal of Fort is readable as being “seated entirely within the recessed seat” in that the outer peripheral boundary of the seal is apparently what defines the boundary of the “recessed seal” opposite the supporting surfaces of the valve poppet.

Fort also discloses a “bi-directional valve comprising: (a) a valve body (16) comprising a radially inwardly directed shoulder (20) and defining a fluid passage; (b) a first poppet (28) biased toward the shoulder (20) by a first spring (30) and comprising a recessed seat (82, 72, 70) circumferentially surrounding an aperture (accommodating the second valve 42); (c) a second poppet (42) biased toward the aperture by a second spring (46); and (d) a seal (52) seated entirely within the recessed seat (82, 72, 70),

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comprising an axially directed first surface (at 54) for sealing the first poppet (28) against the shoulder (20), and a radially inwardly directed second surface (at 56) for sealing the second poppet (42)” as recited in claim 22. The above comments concerning the recited “seal seated entirely within the recessed seat” apply here as well.

Regarding claim 26, Fort discloses a “bi-directional valve comprising: (a) a valve body (16) comprising a radially inwardly directed shoulder (20) and defining a fluid passage; (b) a first poppet (28) biased toward the shoulder (20) by a first spring (30) and comprising a recessed seat (82, 72, 70) circumferentially surrounding an aperture (defined by the inner circumference of seal element 56) having an inner diameter; (c) a second poppet (42) biased toward the aperture by a second spring (46); and (d) a seal (52) seated into the recessed seat (82, 72, 70), comprising an axially directed first surface (at 54) for sealing the first poppet (28) against the shoulder (20), and a radially inwardly directed second surface (at 56) for sealing the second poppet (24), the second surface having a radially inwardly directed extent no greater than the inner diameter of the aperture” as recited. Here the “aperture” is read as the opening defined as having a center on the axis of the flow passage and a radius from the axial center to the contact surface of seal 56. Consequently, the seal 56 cannot extend into the opening or have “a radially inwardly directed extent no greater than the inner diameter of the aperture” as recited.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fort in view of Bowen.

The patent to Fort discloses all the claimed features with the exception of having "the first poppet further including a plurality of outward stops extending from the poppet and defining air flow passages therebetween.

The patent to Bowen discloses that it is known in the art to employ, on a bi-directional check valve device, a "first poppet (A, C) further including a plurality of outward stops (B) extending from the poppet and defining air flow passages therebetween" for the purpose of strictly guiding the poppet valve A in reciprocation within the passage in which the valve A reciprocates while permitting fluid flow across the valve A.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Fort a plurality of "stops" radially extending from the periphery of valve 30, including fluid flow passages between the stops, for the purpose of strictly guiding the poppet valve 30 in reciprocation within the passage 11 in which the valve 30 reciprocates while permitting fluid flow across the valve 30 as recognized by Bowen.

Regarding claim 7, in Fort, "the first spring (30) is positioned between the first poppet (28) and a first spring retainer (cap 24) for biasing the first poppet (28) against the shoulder (20)" as recited.

Regarding claim 8, in Fort, "the second poppet (42) includes a stem (36) extending to a head (42) with a neck therebetween, where the poppet (42) seats within the poppet (28) aperture and selectively against the seal (at 56)" as recited.

Regarding claim 9, in Fort, "the second spring (46) is positioned between the first poppet (28) and a second spring retainer (38) for biasing the second poppet (42) against the seal (at 56)" as recited.

Regarding applicants remarks, in view of the application as originally filed and the newly added recitation "seat seated entirely within the recessed seat", either the application as originally filed does not provide support for this recitation or presuming that the originally filed application provides support, the claims read on Fort as exemplified above, given the reasonable interpretation made above in light of the originally filed application.

Claims 20, 21, 25 and 27 are allowed.

Claim 10 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Claims 23 and 24 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.


Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Rivell whose telephone number is (571) 272-4918. The examiner can normally be reached on Mon.-Thur. from 6:30am-5:00pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Keasel can be reached on (571) 272-4929. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


John Rivell
Primary Examiner
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